ABSTRACT

A method and apparatus for controlling the washing step in a blood centrifugation cell in which washing solution is introduced into the blood centrifugation cell and the cell contains compacted red cells and supernatant at the beginning of the washing step. The apparatus can comprise various sensors and a computer. The sensors sense and transmit to the computer three inputs. The first input is indicative of the total volume of blood that enters the cell during the filling step and the total amount of washing solution that enters the cell during the washing step. The second input is indicative of the hematocrit value of the blood introduced during the filling step. The third input is indicative of the geometric characteristics of the cell. Based on the inputs, the computer executes an algorithm that produces a first output that is the concentration of the supernatant in the supernatant-washing solution mixture.